

उद्योग,ऊर्जा,कामगार व खनिकर्म विभाग
(खुद्द) नवीन संकेतस्थळ विकसित करणे,
Cloud Hosting, डॅशबोर्ड, AI तंत्रज्ञान,
GIS Services,whatsapp chatbot इत्यादी
बाबी साठी प्रशासकीय तसेच वित्तीय
मान्यता देण्याबाबत

महाराष्ट्र शासन
उद्योग,ऊर्जा,कामगार व खनिकर्म विभाग,
शासन निर्णय क्र. IELD-15/286/2025-ADMIN-2
पोटमाळा (एम-६),विस्तार इमारत,मंत्रालय,
हुतात्मा राजगुरु चौक, मादाम कामा रोड,
मंत्रालय,मुंबई-४०० ०३२.
दि.१८ जुलै, २०२५

वाचा:

- (१) शासन निर्णय,सा.प्र.वि.,क्र.मातंस-२०२१/प्र.क्र.१२५/३९,दि.२३.९.२०११
- (२) माहिती तंत्रज्ञान संचालनालयाने त्यांचे पत्र क्र.GAD/मातंस-075/7/2013-DIR-DIT(MH)-DIT(MH),दि.३०.९.२०१३
- (३) शासन परिपत्रक,सा.प्र.वि.,क्र.संकीर्ण-१७२५/प्र.क्र.१२६/मातंस,दि.३०.५.२०२५
- (४) इलेक्टॉनिक्स आणि माहिती तंत्रज्ञान मंत्रालय,केंद्रसरकार,अशा.पत्र क्र.१(२)/२०२१-AS, दि.१९.८.२०२१
- (५) शासन निर्णय,उद्योग,उ.ऊ.का.व ख. विभाग,क्र.प्रअंस-२०२४/प्र.क्र.१०८/प्रशा-४, दि.१६.१२.२०२४
- (६) शासन पत्र क्र. IELD-15/286/2025-ADMIN-2, दि.२४.६.२०२५
- (७) प्रकल्प अमलबजावणी समितीचे इतिवृत्त क्र.संकीर्ण-३४२४/प्र.क्र.९०/प्रशा-४,दि.९.७.२०२५

प्रस्तावना-

१५० दिवसांच्या कृती आराखड्याच्या अनुषंगाने ई-गव्हर्नन्स सुधारणासंदर्भात संदर्भाधीन क्र.३ येथील शासन परिपत्रकान्वये मार्गदर्शक सूचना निर्गमित केलेल्या आहेत. त्यास अनुसरून विभागाचे नवीन संकेतस्थळ विकसित करणे, Cloud Hosting, डॅशबोर्ड, AI तंत्रज्ञानाचा वापर,GIS Services, whatsapp chatbot इत्यादी बाबी विकसित करणे यासंदर्भात कार्यवाही करणे आवश्यक आहे. त्यास अनुसरून संदर्भाधीन क्र.४ येथील पत्रामध्ये नमूद सूचना विचारात घेता सदरची प्रक्रिया शासनाच्या मालकीच्या NICS या संस्थेमार्फत करण्याचा निर्णय घेण्यात आला.शासनाच्या विहित केलेल्या मार्गदर्शक सूचना विचारात घेऊन सदर संस्थेने एम्पॅनेल केलेल्या विविध संस्थामार्फत दि.७.७.२०२५ रोजीच्या प्रकल्प अमलबजावणी समितीच्या बैठकीमध्ये सादरीकरण करण्यात आले. तदनंतर NICS या संस्थेने राबविलेली निविदा प्रक्रिया व शासनास सादर केलेला तपशील विचारात घेऊन विभागाचे नवीन संकेतस्थळ विकसित करणे व तदनुषंगिक बाबींकरिता प्रशासकीय व वित्तीय मान्यता देण्याची बाब शासनाच्या विचाराधीन होती.

शासन निर्णय-

(१) उद्योग,ऊर्जा,कामगार व खनिकर्म विभागाचे नवीन संकेतस्थळ विकसित करणे, Cloud Hosting, डॅशबोर्ड, AI तंत्रज्ञानाचा वापर,GIS Services,whatsapp chatbot इत्यादी व तदनुषंगिक बाबी

विकसित करणे यासाठी रु.४,९५,००,०००/- (रुपये चार कोटी पंच्याणव लाख फक्त) इतक्या रकमेच्या खर्चास प्रशासकीय तथा वित्तीय मान्यता देण्यात येत आहे.

(२) सदर प्रकरणी विभागाचे नवीन संकेतस्थळ विकसित करणे व तदनुषंगिक बाबी विकसित करणे व देखभाल दुरुस्ती करिता NICSI empanelled मे.युनिकॉप्स टेक्नॉलॉजी लि., नवी दिल्ली (M/S UNEECOPS Technology Ltd, New Delhi) या संस्थेमार्फत करण्यास शासन मान्यता देण्यात येत आहे. NICSI या संस्थेने सदर संस्थेस कार्यारंभ आदेश देण्याच्या अनुषंगाने पुढील कार्यवाही करावी.

(३) या शासन निर्णयासोबतच्या जोडपत्रामध्ये नमूद कामाच्या वावानुसार (Scope of Work) काम पूर्ण करणे आवश्यक राहिल तसेच कामाची मुदत कामाच्या वावामध्ये नमूद केल्यानुसार राहिल.

(४) सदर बाबीवर येणारा खर्च २०२५-२६ या आर्थिक वर्षामध्ये या विभागाच्या मागणी क्र.के-८, ३४५१, सचिवालयीन आर्थिक सेवा, ०९०, सचिवालय, (००) (०५) ई-गव्हर्नन्स प्रकल्पाची अंमलबजावणी (कार्यक्रम) (३४५१२७२८), १७-संगणक खर्च” या लेखाशीर्षाखाली रु.९००.०० लाख इतक्या मंजूर केलेल्या तरतुदीतून भागविण्यात यावा.

(५) सदरचा शासन निर्णय दि.७.७.२०२५ रोजी आयोजित केलेल्या विभागांतर्गत प्रकल्प अंमलबजावणी समितीच्या बैठकीत समितीने दिलेल्या मान्यतेनुसार व वित्त विभागाचा शासन निर्णय क्र.विअप्र-२०१३/प्र.क्र.३०/२०१३/विनियम, भाग-२, दि.१७.४.२०१५ अन्वये निर्गमित वित्तीय अधिकार नियमपुस्तिका, १९७८ भाग पहिला, उप विभाग-२, अ.क्र.२७-अ नियम क्र.७६ अन्वये प्रशासनिक विभागास प्रदान केलेल्या अधिकाराचा वापर करून निर्गमित करण्यात येत आहे.

(६) सदर शासन निर्णय महाराष्ट्र शासनाच्या www.maharashtra.gov.in या संकेतस्थळावर उपलब्ध करण्यात आला असून त्याचा संगणक सांकेतांक क्र. २०२५०७१८१७५८०७३७१० असा आहे. सदर शासन निर्णय डिजिटल स्वाक्षरीने साक्षांकित करून निर्गमित करण्यात येत आहे.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नावाने.

(घनश्याम लक्ष्मी नारायण पाऊसकर)
कार्यासन अधिकारी, महाराष्ट्र शासन

प्रत-

- (१) प्रधान महालेखापाल-१/२ (लेखापरिक्षा), महाराष्ट्र राज्य, मुंबई/नागपूर.
- (२) प्रधान महालेखापाल-१/२ (लेखा व अनुज्ञेयता), महाराष्ट्र राज्य मुंबई/नागपूर.
- (३) अ.मु.स.(खनिकर्म/ऊर्जा), प्रधान सचिव (कामगार व प्रशासन) व सचिव (उद्योग), मंत्रालय, मुंबई-३२
- (४) सर्व सह सचिव/उप सचिव, उद्योग, ऊर्जा, कामगार व खनिकर्म विभाग, मंत्रालय, मुंबई-३२
- (५) अधिदान व लेखाधिकारी, मुंबई
- (६) संचालक, लेखा व कोषागारे, मुंबई
- (७) सर्व अवर सचिव/कक्ष अधिकारी, उद्योग, ऊर्जा, कामगार व खनिकर्म विभाग, मंत्रालय, मुंबई
- (८) General Manager, NICSI, Mumbai
- (९) Director, M/S UNEECOPS Technology Ltd, C-185, Phase-1, Naraina Industrial Area, New Delhi-110028
- (१०) निवडनस्ती : प्रशासन-२ कार्यासन

शासन निर्णय क्र. IELD-15/286/2025-ADMIN-2, दि. १८.७.२०२५ सोबतचे
जोडपत्र

Industry, Energy, Labour and Mining Department

Scope of Work

for

Design Development and Implementation of Integrated Web
portal, AI-based chatbot, Dashboard and Mobile App for
Industry, Energy, Labour and Mining Department with 3 years
Maintenance

1. Scope of Work

Industries, Energy, Labour and Mining Department, seeks the services of a qualified Agency for developing Website and Mobile Application. The agency would provide end to end managed services for Design Development and implementation of integrated Web portal, AI-based chatbot and Dashboard for Industry, Energy, Labour and Mining Department with 3 years maintenance that should be included with the content management system (CMS) in compliance with GIGW Government of India Guidelines of websites (<http://web.guidelines.gov.in/> for reference).

The project will include development of following:

1. Website for Industry, Labour and Mining Department
2. Website for Mathadi Board
3. Integration of Security Guard Board Website; Labour Commissioner Website and other Departmental websites through links and on their landing pages
4. Integration of Department portals like LMS, DISH portal, CIS, BMMS, Cess Portal, IWBMS, RPL, HLL/ HSCC and other Department portal through API
5. Linkages to important State and GoI websites

The details of the above are as follows:

1. Website for Industry, Energy, Labour and Mining Department

Proposed website will include pages for the administrative Departments i.e. Industry, Labour and Mining Department and there will be three websites within the main website and mobile application. The selected agency will also be responsible for hosting website and mobile application on cloud for Industry, Energy, Labour and Mining Department. Cloud procurement will also be a part of the Agency's responsibility.

Proposed Website

Note: Content for the websites will be provided by respective Industry, Energy, Labor and Mining Department and the respective offices of Mathadi Boards and Security Boards.

Selected bidder shall be responsible for following:

- Design, develop, integrate, operate and maintain a mobile application for IELM Department
- The application shall have synchronized all the features with the website developed for IELM Department.
- The AI powered and NLP system chat bot on the front end of the IELM website
- WhatsApp Business API-based chatbot solution (voice enabled) for the IELM (Industries, Energy, Labour & Mining) Department
- Integrated dashboard for all the Departments like services, schemes etc.

1.1 Overview of Scope of Work

#	Broad Scope of work	Deliverables
1	Design and Development of Standard Website with Advanced features	Requirement study and documents like SRS, FRS, layouts and diagrams, Go-Live etc.
2	Data Entry, digitization, and conversion of the records and migration of the data available in the existing databases of existing website	Data digitization and migration Report
3	Conducting Security Audit, UAT and Go-Live of website/Portal	Security Audit Certificate, Training manuals, Testing Plans, Test Cases
4	Managed Hosting Services: Hosting (on Cloud), Operations and Maintenance for a period of 5 years which includes software cost, license cost etc.	Sizing, procurement and deployment of cloud services
5	Operations and Maintenance support post completion of 1 year of website Go-Live with one onsite dedicated manpower for Support and Content Management for the period of 3 years	Operations and Maintenance support for 3 years post completion of 1 year of website Go-Live

The detailed scope of work is mentioned in sections below:

1.2 Requirement Study and Preparation of SRS Document

The functionality requirement mentioned below is the representation of the overall requirement at Industries, Energy, Labour and Mining Department. Successful Bidder shall visit Industries, Energy, Labour and Mining Departments (on prior approval of respective Industries, Energy, Labour and Mining Department and its officials) and understand their requirements in detail.

Successful bidder shall prepare System Requirement Specification (SRS) document to freeze the exact scope for the project. The successful bidder shall seek approval from Industries, Energy, Labour and Mining Department for SRS created by them. Once SRS has been approved, successful bidder shall commence implementation. The SRS approved will form the baseline for all subsequent phases of website/application development and deployment from a website/application requirements perspective (e.g. for testing, identifying “change” to requirements etc.).

Website shall be rich in content including easily downloadable high-resolution Images, Videos and other Multimedia contents and compatible on all the device and operating system agnostic. The website shall be bilingual i.e. the admin should be able to enter and update contents in Marathi and English. Online translation tool shall not be used for translation of website content from Marathi to English or vice versa.

1.3 Scope of work for Development of website at IELM department

The official website shall be developed using state-of-the-art technology, to deliver content rich, customizable, theme-able, high-performance secure website. It includes, but is not limited to, the following design considerations:

1. Use of Web Application Framework, Web Content Management System or Application Server Software, backed by a database, to deliver the site contents.
2. Use of themes to quickly and effortlessly change the presentation layer of the site without impacting the content or the structure of the site without IT Intervention
3. Provides rich user interface by use of AJAX, Flash, HTML5 etc.
4. Creation of rich artwork and photo/video processing to augment the content and overall branding
5. Should have the ability to showcase website in Marathi & English (bi-lingual) with regional & localization and Unicode support.
6. Website should be incorporated with Content Management System
7. Provides an easy-to-use administration interface to update the content with at least 2 defined users. Should preferably provide users with content updating rights.
8. Use of Search Engine Optimization (SEO) friendly clean permalink structure and SEO Best Practices for website design, structure and content.
 - a. Search engine and Sitemap functionalities on site to facilitate easy navigation and instant access to relevant information (example: services \Schemes \contacts).
 - b. Making design and architecture of the site friendly to search engines in bilingual language
 - c. Meta tagging and indexing all pages
9. Provides accurate and fast Search through the website pages and data uploaded without having to tag metadata manually. Should provide search filters for search results generated.
10. The website shall allow choice of themes, skins, pages and page layout.
11. The website may allow choice of regular/lite version and light and dark modes.
12. The agency shall pre-configure the portlets/ Widgets/ webparts/ apps like RTI portal, grievances etc. to integrate with the back-end systems and if required.
13. The website should be capable of presenting personalized content based on individual user's profile or role.
14. The website should provide functionalities that integrates with internal employee self-service functions, administrative functions etc. such as Leave, Payslip etc.
15. Provision of uploading & sharing agenda of Meeting's and minutes of Meeting.
16. Role Based Access (Admin, General User etc.)
17. Should support and have valid SSL certificate.
18. Bidder will be responsible for procurement of SSL Certificates without any extra cost to the department. The latest vulnerability-free protocol version of SSL/TLS should be installed for the website. The SSL/TLS should be Extended Validation Certificate. If it is found during the operation of SSL/TLS that the existing version has become vulnerable, then the vendor shall immediately replace the same with latest version of SSL/TLS without cost to the Department. SSL to be set up from the beginning of the website/portal, enabling HTTPS for data collection
19. Website should have features/Section but not limited to such as
 - Highlighted/Urgent/Past Due - Events / Trainings/ Drills
 - Training/Learning Materials
 - Upcoming Events/Calendar /Holidays/ Meetings
20. The Website should have the provision for easy integration with other external portals through APIs.

21. To develop any new modules/new integration/API Integrations during the full period of contract, as per requirement of the department with no extra cost
22. The new website shall be cross platform with any one of the following Web Application Frameworks / Web Content Management Systems / Application Server Software (at the latest stable version) such as: PHP: Drupal, Joomla; Java: Tomcat, JBoss; Microsoft SharePoint; LifeRay; WebSphere or any other framework.
23. The solution provider shall be responsible for procurement, deployment, commissioning, operations and maintenance for above mentioned Web Application Framework / Web Content Management System / Application Server software (PHP/ Drupal/ Joomla/ Tomcat/ JBoss/ SharePoint/ WebSphere etc.), at its own cost for all server and end user licenses throughout the entire project period.
24. The solution provider shall carry out the Website development work on turnkey basis, i.e., procure, deploy, commission and support etc. the entire software stack required for the Website at its own cost, including its comprehensive operations & maintenance (bug fixes, updates etc.) during the entire project period.
25. Proposed website shall fulfill the following criteria's

#	Necessary Criteria
1	User-friendly Interface
2	Accessibility
3	Up-to-Date Content of the all the department
4	Data and Integration (Logic)
5	Search Functionality
6	E-Governance Integration
7	Secure and Reliable
8	Feedback and Grievance Redressal
9	Contact and Help Resources
10	Compliance and Certification

1.4 Content Management

Industries, Energy, Labour and Mining Department Website will be the primary source of information for the stakeholders. It is thus important that comprehensive, correct and up to date information is made available over the website. Industries, Energy, Labour and Mining Department Website will have following type of contents:

I. Primary Content: Primary content shall be original content that is sought by target audience of the website which could be citizens, business community, overseas citizens or other government departments or even government employees. This will include information about the department, various schemes & programs of the department, documents, form however not limited to these only. The section will include:

- About Us
- Organization Structure
- Services
- Photos & Video Gallery with embedded Photo viewer and Video Player
- Application forms- Online Workflow – RTI, Grievances, etc.
- Act and Rules
- Circular/Notifications
- Tenders & Notices
- News and Press Releases
- Contact details
- Message from the Leadership
- Any other as suggested by the Department

II. Secondary Content: Secondary content is generated from the assortment, packaging of primary content to suit the requirement of different audience, events and occasions examples of such content are advertisements/banners/spotlight/media gallery/related sites.

- Passenger group corner
- News, Tenders, Vacancies
- Links to e-Tendering, other links
- Events and Announcement
- Discussion forums
- Usage Policy
- Related links
- Spotlight/ Industries, Energy, Labour and Mining Department news flash
- Community Spotlight/Highlight
- Timeline Feature- To showcase Anniversaries / Milestones / Years of operations
- Any other as suggested by the Department

III. Tertiary content: Information about the 'primary' and 'secondary' content forms a part of the tertiary content. This includes:

- About the site
- Navigation aids sections such as online help, Site map, Search
- Terms and Conditions with respect to usage of content on the site
- FAQ
- User Feedback
- Other important/useful links
- Help

- Bookmarked Content
- Email This Page
- Social media tab: Social media accounts of the Department to be integrated with the CMS web portal.
- Any other as suggested by the Department

1.5 Grievances Redressal / RTI / Complaint Management

- Grievance System / Logger
- Should have options for registering complaints/ RTI/ Grievances online.
- System shall provide drop down menu
 - For selecting category of complaint
 - Various possible nature of complaints under each category
- Should give the citizen/employee/other stakeholder, the complaint number upon registering the complaint.
- System shall flexible workflow to allow administrator to divert the complainants to concerned officers and take necessary action
- Masters & Initial Setup:
 - Complaint Type, Sub-types.
 - Mapping of Designation / Roles to Complaint Sub-type.
 - Citizen Charter for each Complaint Type (Define duration of complaint redressal & escalation path in case of non-redressal).
- System shall allow complaint the status of action on his/her complaint.
- The system shall allow tracking feature, RTI, Grievances for Industries, Energy , Labour and Mining Department users as well as Citizens.

1.5.1 Feedback Management

- Capture consumer feedback at the end of conversation.
- Capturing case feedback through email/SMS etc.
- Conducting scheduled feedback from customers
- Conduct Feedback Analysis through charts and dashboard

1.6 Visitor Management System

The Visitor Management System (VMS) is intended to provide a secure, efficient, and digital method of handling visitor entries at IELM offices. Traditionally managed through paper-based logbooks, visitor registration will now shift to an online module integrated within the IELM website. This module will streamline the visitor check-in/check-out process, enhance transparency, and ensure better record-keeping and communication between visitors and departments.

1.7 Chatbot for IELM Website

The **AI powered and NLP system** chat bot should provide readily available solution capable of answering frequently asked questions (FAQs) and providing real-time support to users of each Department and also highlighted uncovered issues. The chat bot should be user-friendly, platform and device agnostic. The platform must feature a user-friendly interface for building and deploying intelligent chatbots. This

includes:

- 1 Integration with website frontend.
- 2 Interface to manage and update FAQ content.
- 3 Ability to download chat logs and performance reports.
- 4 Search GR's and documents for each Department
- 5 AI based summary of GRs and documents
- 6 Information broadcasting, Self-service Chatbot,
- 7 Application tracking and Status update,
- 8 Document submission,
- 9 Scheduling appointments
- 10 Live Chatbot to be enabled/ integrated to address preliminary/ basic queries related to related to the information and/ or documents/ datasets/ reports available on the IELM website. Chatbot should be able to assess and address at least 95% of the user queries for which the latest content is available on the website
- 11 Knowledgebase for the Chatbot should be Text, PDFs, Excel, etc.
- 12 Support for multilingual interactions and customizable intents/entities.
- 13 Provide fallback responses if the bot doesn't understand a question
- 14 AI-powered chatbots and NLP systems can handle User complaints, provide information on entitlements, and escalate unresolved issues.
- 15 AI/NLP powered chatbot should provide accurate responses to the queries, recording grievances and providing seamless experience throughout the entire user journey.
- 16 Sentiment analysis can help identify systemic issues from complaint data.
- 17 The chat bot developed by the bidder should also continue to work even after the end of contract period with or without the requirement of taking technical support from bidder.
- 18 Chatbot shall offer an interactive dialog interface for engaging workers/user in a chatbot session. In order to start a conversation, chatbot shall send an interactive list of options related to different types of services available, service application forms, list of service certificate to be downloaded. Chatbot response shall be based on the organizational knowledge base or to a specific query generated by the citizen based on their Mobile number/ Certificate Number or Name/ Aadhar Name.
- 19 Chatbot needs to be integrated with services/facilities available on Department portal, Web Applications, CRM, other applications, etc.
- 20 The chatbot should provide contact information of relevant government officials for specific schemes, ensuring users can easily reach out for assistance and get the required information quickly.
- 21 Chatbot shall be flexible to incorporate new services/facilities like Application tracking, receipt generation, eligibility information, payment status check, complaint/grievance services, etc.
- 22 The bidder shall have to customize the Chatbot from time to time as per the requirements of IELM Departments. No extra charge will be paid by IELM department for such customization during the contract period apart from that agreed in BoQ. As it is a time bound project, the customizations shall be delivered within a mutually agreed timeline.
- 23 The chatbot also must support voice-based commands in multiple languages as some of the beneficiaries may not be able to read or write.

1.8 WhatsApp Business API

The WhatsApp chatbot should enable Information dissemination, complaint resolution, self-service, application tracking and status update, document submission, scheduling appointments are the facilities.

The department also intends to implement a Frequently Asked Questions (FAQ)-based service to provide citizens with automated, reliable, and multilingual responses to queries related to services offered by each of the four constituent departments. The selected bidder shall deploy a WhatsApp Business API-based chatbot solution for the IELM (Industries, Energy, Labour & Mining) Department. This solution will be integrated with the IELM department website and serve as a first-level interface for information. The chatbot will act as a unified digital interface integrated with the IELM website to enhance citizen-centric service delivery through automation, transparency, and accessibility.

WhatsApp chatbot for the IELM website that enables quick communication with Users and automates responses to frequently asked queries. This Includes:

1. Selected bidder shall Conduct a comprehensive requirement study in coordination with IELM officials or based on pre-identified FAQ documents.
2. Identify frequently asked questions across the four departments Services, Schemes etc.
3. Assist the department in setting up a verified WhatsApp Business account. The service provider shall assist the department in WhatsApp Business Account Creation, Verification, and timely approval of the account.
4. Coordination with the department for onboarding WhatsApp Business Account and management services i.e., Account verification and template approval from Meta.
5. WhatsApp Chatbot Setup: Use official WhatsApp Business API via a provider
6. Website Integration: Chat with us on WhatsApp" button embedded on the IELM website (footer, contact page, homepage).
7. The chatbot also must support voice-based commands in multiple languages as some of the beneficiaries may not be able to read or write.
8. Implement sending WhatsApp messages in English or Marathi language or a combination of both. Messaging framework must be capable of sending messages in various multimedia formats like images, PDFs, videos, emojis, etc. as allowed by WhatsApp/Meta and the file size limit should not be less than that of the permissible limit by WhatsApp/Meta.
9. Service/ API onboarding/ integration on WhatsApp Communication Management Solution for department application.
10. WhatsApp chatbot also make promotions the Schemes, Services etc.
11. Grievance management solution:
 - WhatsApp-based Grievance Registration.
 - End to End Ticket management and tracking of grievance.
 - Auto routing option to route grievance to concerned department.
 - Admin dashboard for grievance tracking and analysis.
 - Role based access for access control.
 - API-based integration with State government/IELM grievance portals.

1.9 GIS

- The bidder has to design & development of an interactive web-based GIS platform with mapping functionalities on website. All the WFC's should get tagged on website for the Labour department. By mentioning the district name, location name and other details as suggested by the Department for the overview.
- Conducting beta testing for usability and accuracy of GIS tagging functionality.
- Mapping APIs: Utilize platforms like Google Maps, OpenStreetMap, or Mapbox for interactive maps and navigation features.

- **Route Optimization:** Provide navigation paths, directions, and alternative routes
- **Mobile Compatibility:** Ensure responsiveness and seamless navigation on mobile devices.
- **User Input & Search:** Allow users to enter locations, search places, and get relevant geospatial information.
- **Performance & Speed:** Optimize map rendering to prevent slow loading times.
- **Security & Privacy:** Protect user location data and adhere to regulations like GDPR

1.10 Dashboard

The selected shall bidder design a integrated dashboard for the Industry, Labour, Energy, and Mining Departments. The Departments have multiple portals and the dashboard of all these portals have to be integrated into one presented on the main website for the respective Departments. However, as per the requirement from each department selected bidder shall develop integrated dashboard on the website. dashboard aims to enhance transparency, improve governance, enable data-driven policymaking, and monitor key schemes and KPIs. Dashboard should have role-based access.

There are multiple portals including all offices under the Department such as LMS, DISH portal, CIS, BMMS, Cess Portal, IWBMS, RPL, HLL/ HSCC etc. The infographics and the charts should be dynamic based on various filter selected and should be based on tools like PowerBI, Tableau etc.

The portal shall have single dashboard (Login Based, Single Sign on, as approved by the department) to view status of existing programs and department progress. The configuration shall support API based integration with existing and upcoming Department applications.

Integrated dashboard should have following features:

1	Clarity and Simplicity
2	KPIs for state government schemes and services
3	Data Integration (APIs)
4	Customizability
5	Real-time updates
6	GIS based mapping
7	Interactivity
8	Accessible across Devices
9	Security and Role based access

Analytical & Visual Components

- Time-series charts, heatmaps, and GIS maps
- Filters by district, scheme, time period, and sector
- Target vs. achievement visualizations
- Predictive alerts for underperformance or delays

1.11 Develop a Mobile Application for IELM

As part of the digital initiative by the Industry, Energy, Labour and Mining Department, the selected shall bidder design, develop, operate and maintain a unified mobile application for Industry, Energy, Labour and Mining Department. The application shall have synchronized all the features with the websites developed for IELM and shall be user friendly, lightweight & informative. The following provides the detail scope for the development of a unified mobile application:

a. Objectives

IELM needs to get a Mobile Application developed for the website mentioned in this RFP with the following main objectives:

- i. To make Mobile App accessible on platforms like Android & iOS etc.
- ii. To provide information to users with minimum number of clicks
- iii. To get security certificate from certified vendor
- iv. Development of consistent visual elements and Mobile Apps architecture that is scalable and expandable
- v. Enhance the presentation of the content

b. General Requirements

- i. Should use the content available on the websites
- ii. User feedback and reviews mechanism
- iii. Analytics mechanism to track and identify user experience and actions
- iv. App should be able to accommodate the future scalability requirements
- v. App Admin should be easy in terms of usability and changes in design & content
- vi. Network level security, traffic to be encrypted using secured connectivity
- vii. Continuity Measures, risk management plan for the continuity of services, data backup policy, business continuity plan
- viii. Functional Requirement Documentation, App Design Documentation, App Installation guide, App Administration guide and App User Operation document to be provided.
- ix. Identification of App limitations
- x. Option to allow choice of themes, skins, pages and page layout and choice of regular/lite version and light and dark modes.
- xi. Storage disk space and memory required for the proposed App
- xii. List out the assumptions related to load & infrastructure (such as mobile specifications, internet bandwidth etc.) so that response time is always < 20 seconds
- xiii. Delivery should be in the form of a published app in the respective marketplace and will be the property of IELM
- xiv. Performance Testing, Security Testing & Usability Testing certification from certified vendor
- xv. Overall Integration, User acceptance testing & Go-Live
- xvi. Mobile Apps download based on phone OS and services
- xvii. Feature for updating application with permission to download

- xviii. One-time download & freely available at Google Playstore and Apple Appstore, No running cost for user
- xix. Provision shall be made to include all future upgrades, patches, OS version upgrades and maintenance of the application
- xx. Provision shall be made to include the requirements of Plugins such as Flash player to run videos
- xxi. Handover, guidance and training to staff to make design changes, to update content and to maintain the proposed solution
- c. Accessibility of Mobile Apps Structure
 - i. Develop user-friendly Mobile Apps
 - ii. Structure overall content with proper tagging to make it reader friendly
 - iii. Ensure Compatibility with platforms such as Android & iOS
 - iv. Develop Resolution independent design structure
- d. Resolution Independent Mobile App structure: Mobile App can adjust screen resolution as per available sizes in the market. Resolution independent Mobile App will automatically expand/compress itself as per the screen resolution and hence there should not be any vertical scroll in the Mobile Apps structure. There should be minimum use of flash.
- e. Dynamic Content Management System (CMS) features:
 - i. Dynamic menus: Menus and submenus should be created based on the page-tree as pages are added and subtracted. These should be styled entirely through Cascading Style Sheets (CSS) and stored in database.
 - ii. Audit Trail: Administrators should have access to one log in the backend or individual logs of each page where user can view from whichever place the Mobile App is viewed with daily reports.
 - iii. User Privileges: An administrator can grant as little or as much control to content editors or groups as needed to other controlling accounts to the Mobile App, which means if a user has to update any section in Mobile Apps, for example Reports section, then user can modify only Reports section. All other sections should appear disabled to that user.
 - iv. CSS Styled Content: All aspects of the core functionality should be styled on the Mobile Apps. Most extensions should be styled through CSS.
 - v. Minimal Training Required: Editing content should be as easy as editing the Microsoft word.
 - vi. Each element on the Mobile App can be modified easily.
- f. Feedback Management:
 - i. This shall help user department in collecting feedback from Mobile app users.
 - ii. To develop an online form for collecting feedback from Mobile App users.
 - iii. All the feedback data should be emailed to the designated officer's email ID.
 - iv. A copy of all the feedback received should be stored in the Database on the server for subsequent review by the administrator
- g. Mobile App statistics:
 - i. To help user department in analyzing the popularity of the Mobile App and visitors' behavior pattern on the Mobile App

- ii. To facilitate the administrator to view Mobile App hits
- h. Security Auditing:
Security clearance certificate should be obtained before hosting Mobile App. Security clearance certificate should be provided from certified auditor to address this requirement.
- i. Onsite Training:
Onsite training to staff on overall workflow of the developed solution and backend administration functions at office.
- j. Development & Hosting Environment:
Front-end Mobile Apps shall be designed and developed in a visually rich and appealing format. Web development/Hosting services should be supported on Windows & Linux platform using the state-of-the-art technologies.

1.12 Project Planning and Management: Initial Phase

In this phase, Bidder shall do the following activities:

A) Requirement Gathering & Designing of proposed websites and mobile application

The bidder is required to perform a detailed requirement gathering for the websites from Industry, Energy, Labour and Mining Department. For this purpose, each department will arrange discussion session with the relevant employee(s). Post understanding the requirements, the Bidder is required to prepare inception report including proposed architecture design with best available solution to develop a more attractive, user-friendly, interactive & informative website.

B) Development Tools

The Bidders shall use the tools and technologies (preferably Licensed or proprietary development tools) which fulfils are the requirements mentioned in this document for Websites development. The development tools shall be discussed with relevant IELM department authority for the final approval.

C) Prototype of New Web Portal

After a final go-ahead is provided by respective IELM Department, the Bidder is required to present 3-5 wireframes followed by Min. 5 browser enabled prototype of design of the website along with the migration strategy for portal. The Bidder is also required /to provide site map. Once the prototype is approved by relevant IELM Department respective authority, Bidder shall start work on development.

1.13 Development Phase

In this phase, Bidder shall develop the websites as per report & prototype. The bidder shall include but not limit to the following elements and/or as decided in initial phase.

- i. **Look & Feel**

The website should be designed by using some strategy of themes so that each section has symmetry in look & feel based on IELM department objectives and logo.

ii. Design Interface

- The content should be a mixture of text, images, downloads & videos (where needed) and have symmetry in look & feel based on Themes & Navigation strategy.

iii. Sections Wise Distribution of Contents

All content in website should be distributed in sections and sub-sections. Each section and sub-section should have a specific content type and should have easy navigation within that section and other related sections.

iv. Dynamic Updates of Contents

The content in each section of the website should be able to dynamically update without updating the entire page.

v. Content Management System

- a. The proposed website shall comprise both static and dynamic components and shall be developed with various features.
- b. The new website must be developed on the concept of Web Content Management System (WCMS) keeping in consideration so that each section, page & content of the website is preferably managed through Admin Panel.
- c. Creation and Maintenance of a comprehensive Content Management System as a single repository for storage of all types of Website and mobile application content such as video and images along with controlling placement of content.
- d. The agency will help in procuring, registering and maintaining domain name for the website.
 - The CMS shall provide multi-domain support and shall be compatible with mobile application platforms.
- e. The CMS shall support optimized presentation of assets based on device form-factors, network speed, etc. for optimal page load times.
- f. The CMS shall support for content aggregation & syndication (such as RSS feeds).
- g. The CMS should have Centralized template management for consistency within the portal.
- h. The CMS should be flexible and user friendly to allow extensive use by users of varying levels of technical knowledge.
- i. Ease of modification of presentation of the site and application without changing the content.
- j. Ease to use administration facility with well-defined workflows for easier updating of content.

- k. Automatic versioning of pages & capability to view the changes in the pages using GUI so as to know how the pages have changed over the time.
- l. Support for check-in, check-out and locking of pages. Support for scheduled publishing and expiry dates.
- m. Roll-back a page and or content to a specific version.
- n. Automated metadata extraction & population from images and documents uploaded.
- o. Support for annotation of pages & images and comments with audit trail. Integrated Digital Asset Management system with support for Rich Media Content including videos, documents and support for different image formats including JPEG, GIF, PNG. Support for content architecture/models (including basic structure of assets, campaigns, content etc.), tag management & custom metadata schema definitions.
- p. The website and the mobile application should support multi-lingual assets. Support menus driven by statically defined role-based access control. Support dynamic menus driven by personalization and complex business rules.
- q. Search (author search) implementation including support for full text & meta-data-based search; ability to save search criteria for ready access.
- r. The solution must be capable of creating multiple user credentials with the privilege to modify/update content.
- s. The CMS shall provide multi-domain support and shall be compatible with mobile application platforms.
- t. The CMS shall support optimized presentation of assets based on device form-factors, network speed etc. for optimal page load times support for Content aggregation & syndication (such as RSS feeds).
- u. The CMS shall have a centralized template management for consistency within portal.

Web Content Management System Module – Authorized respective Industry, Energy, labour and Mining department users shall be able to upload the content such as Photos, News, Project Information, Contact details etc. on website. It should facilitate rich text editors for content uploading. The contents must be in Unicode format. The Content Management System (CMS) should have the following features or capabilities:

- Content Authoring, Publishing, Delivery, Content Storage Management, Content Exit and Archival.
- Should have preconfigured generic templates and workflows for the content management Distributed authorship of portal content across divisions.
- Separation of content from presentation, which allows authors to focus on content rather than web design.
- Management of revision, approval, publishing and archiving processes in an easy and automated manner.
- Centralized template management for consistency within portal. Content repurposing for different audiences and different interfaces.
- Facilitated metadata generation and management which enables effective content discovery.

- Content storage management of all types of content; text graphic, audio, video etc. In context contribution, purview, updates and approvals.
- Both dynamic and scheduled publishing models. WCMS should be able to generate content feeds.
- WCMS should be able to be integrated with any workflow systems, which supports e-forms.

vi. Easy Navigation

The website and the mobile application should be designed in such a way so that user-level navigation is easier. Links & sub-links should be grouped in two or three layers (as required) of Navigation on top or/and left side of the web pages. The navigation and landing page should meet the international web standards.

The website should allow the visitors to find what they are looking for without confusion or unnecessary clicks. However, the website should have the following features for better navigation and hold the visitors to go through the information sought:

- Clutter-free navigation.
- Good internal linking.
- Informative header and footer.
- The home page & key section landing pages should load in 3 seconds or less and all other pages in 5 seconds or less.
- The website shall help both users and search engines navigate the site easily by mapping hierarchical list of pages (with links) organized by topic.
- Website should support Omni Channel form factor and should do auto sizing while streaming of images and videos based on available network.
- CMS shall support creation of navigation, breadcrumb and sitemap that will be published and rendered on Portal.
- The content in all sections or information modules of respective websites shall be published with vertical scroll navigation only.
- There shall be provision of the print, save functionality for the individual webpages in the information modules of websites.

vii. Administrator's Control Panel

A web-based control panel is required to centrally administer the content, theme, navigation, design, sections, pages, users and database(s) of the website. The Administrator's control should have following features:

- Reports for management to check website traffic details such as unique visitors, return visitors, cohort analysis, country/origin, pages visited, bounce off reports, most visited destinations, attractions, content consumption patterns, device/OS reports, most searched destination, campaign metrics, path flow etc.
- The reports must be updated real-time without any time lag.

- The panel should enable easy to do ad-hoc analysis with the ability to create individual workspaces & dashboards for each analytics user.
- The panel should support collaboration with easy sharing of reports.
- The panel should be able to support analysis for different segments, comparison of segments, generate reports for different time periods, metric comparison for two-time periods etc.
- The panel should have the ability to create virtual reports/dashboards.
- The panel should have the ability to share audience segments real-time with other delivery platforms such as CMS, Optimization engines, Campaign Management systems etc.
- The panel should have the ability to easily discover & create new audience segments at the click of a button.
- The panel should provide detailed link analysis for a page to understand the most useful/accessed links on a given page, including real time analysis & updates.

1.14 Testing

A. Stress and Performance Testing

1. The Bidder shall set up the performance environment and deploy the applications on this environment for testing.
2. The Bidder shall load test the website/portal to enable understanding of performance and behavior of the website/portal simulating large number of users and high-load conditions.
3. Appropriate reports indicating the performance results done using performance testing tools to be made available to the satisfaction of IELM Department.

B. Security Testing

1. The website/portal should comply with the security guidelines published by OWASP (Open Web Application Security Project).
2. Appropriate reports indicating security testing results done using web security and penetration testing tools to be made available to the satisfaction of IELM department.
3. Modules being developed for the website/portal must go through mandatory Quality Control and QA testing. Security audit be cert-in empaneled agencies.

C. System Integration and Unit Testing

1. Each module or Component Web portals should be fully tested independently before integration (wherever applicable).
2. All specified functionalities should exist. This testing verifies the as-built program's functionality and performance with respect to the requirements for the solution provided.
3. All System functions that are accessed through menus will be tested.
4. The bidder shall perform testing of Components and Component Integration.
5. The bidder shall perform testing of System Interfaces and parameter interfaces.
6. The bidder shall perform testing of response time, throughput and availability etc.

D. User Acceptance Testing (UAT)

As part of the User Acceptance Testing, the IELM department expects the following from bidder:

1. Share the project plan well in advance with IELM department and accordingly the team should work to complete the UAT on time.
2. The successful bidder is expected to assist IELM department in performing UAT of the solution as part of deployment and subsequent changes. The successful bidder will prepare test cases and shall be responsible for securing necessary approval from stakeholders on acceptance of the test cases.
3. The successful bidder would also be responsible to independently test the CMS, new developed website/portal for its working and also assist IELM's department core team in the testing post Hosting website on cloud.
4. Bidder to provide dedicated team for UAT.
5. UAT to be done at respective IELM's Department premises. However, IELM Department will not provide any infrastructure to conduct UAT and bidder will be responsible for arranging necessary infrastructure for UAT.
6. Customization of the application software, if required has to be done by the bidder at no additional cost to the IELM Department based on the UAT observations and GIGW 3.0 guidelines to meet the functional requirement.
7. The team should report daily status to the IELM's IT head or the person responsible for the rollout at IELM's end.
8. Any deviation in the scheduled UAT plan has to be immediately communicated to the IELM Department.
9. The successful bidder should co-ordinate with the IELM Department IT team whenever required for any input from each department in regard to UAT, respective IELM Department will designate resources from IT team for the same.

1.15 Delivery Phase

1. In delivery phase, the solution provider shall be responsible to publish the website.
2. In delivery phase, the solution Provider shall also be responsible to hand over in writing all development components like source code, passwords, databases, text, graphics or any other relevant material to IELM Department.
3. At the time of handing over, the development components shall become the sole property of the IELM Department.
4. The solution provider shall provide one (01) month free technical support (Stabilization period) after the delivery of the website. The SLA will become active after the completion of one (01) month period of free technical support.
5. Technical support includes but not limited to the following:

- i. Source code and database update and support
- ii. Bugs Fixture
- iii. Malfunction Errors

1.16 General Requirements: Website Design

IELM department envisages providing multiple services to the stakeholders through the portal. These will include:

2.10.1 Search

1. Citizen/ website users should be able to search within website.
2. The website should provide metadata and 'full text search' based on elastic search functionality.
3. For providing search functionality the website should comply within defined processes for defining metadata, managing metadata schema changes and master data changes.
4. Search must allow the archived content to be included (or excluded). Advanced search facility based on multiple filters should be provided.
5. Advanced search facility based on multiple filters should be provided.

2.10.2 Integration with Existing Services and Open API's

The proposed website/ portal/ solution must be able to integrate with existing as well as envisaged e-governance applications, Mobile Applications, Web Applications etc. The system should be capable to provide APIs to interact with the third-party systems to enable seamless integration with the third parties. This would enable to be future proof allowing for integrations with solutions that are not currently available with the department. It should have ability to integrate with legacy databases. It should support for both native and hybrid mobile apps and other front ends connecting through APIs.

2.10.3 User Administration

Provide web-based administration interface. Allow portal administrator to delegate the administration function. Reduced server-side coding so that the focus can be more on front-end development and faster rollouts.

1.17 Security Audits

- Website to be security audited by the STQC/Cert-In empaneled Security Auditors or Government of

Maharashtra empaneled Security Auditors. Cost for Security Audit of website should be part of the proposal as cost of the same will be borne by bidder.

- The service provider needs to update the system in response to any adverse findings in the report, without any additional cost to IELM Department ensure complete security audit done successfully. IELM Department may also depute auditors to conduct security check/ vulnerability test/penetration test.
- The portal must have necessary security measures in place and should not have any loopholes that can be exploited. Portal should also support latest security certificates like SSL 3.0. If required, portal should have the ability for integration with any active directory server (supporting LDAP).

1.18 Training

The agency shall provide the following training:

- A detailed technical as well as functional demonstration to the IELM Department team at various levels to central office.
- A user manual should be provided in editable format (MS Word) as well as a colored hard-bound copy with clear pictures showing website layouts for content managers. The bidder shall provide website training and handholding to new users or refresher training to old users.
- Training material/kits to be used in trainings should be arranged by the bidder during training provision.
- Training delivery will be conducted at offices/sites as per the convenience of IELM Department. This will happen in logically made groups of attendees and will be finalized by the agency in consultation with the IELM Department.
- All the cost for all training (above stated and future trainings) will be borne by bidder only.

1.19 Technical Requirements

- Be able to operate in Windows or UNIX or LINUX operating system.
- Be capable of utilizing the Active Directory OR LDAP v3 based directory for security and personalization.
- Support fail-over and load balancing to facilitate future scalability.
- Support all industry standard web browsers latest versions (e.g. Internet Explorer, Mozilla, Chrome etc.)
- Should support web traffic reports for administrators and community managers
- Support industry standards communication protocol and data formats latest versions such as HTTP, HTTPS, SSL, XML and HTML for query and retrieval purposes.
- Should support broad range of standards for example DOM 1.0, HTML 5, HTTP, HTTPS, MathML, ODBC , ODF (IS26300) , Open XML (IS29500), OpenSearch, OpenType, PDF 1.7, PDF/A, RTF, RSS, ATOM, SOAP, SVG, REST, UDDI, Unicode, URI/URN, W3C XML Schema, WCAG 2.0, WebDAV, WSDL, WSRP, XHTML, XML, XML Web Services, XML Dsig, XPATH, XPS, XSLT.

- Website shall support Web 2.0 capabilities
- Website shall facilitate integration with social networking sites and the option should be provided to the user to add the link to the pages to their favourite social networking site.
- Feature for Blog Updates (from Management and PR Agencies)
- The pages should be printer friendly i.e. all the pages shall be displayed and printed upon demand by user
- The website shall be accessible through mobile and other handheld devices like iPad; tablets etc. and the pages shall adjust suitably as per the device without having to transcode for specific devices.
- To run independent of IP Address i.e. IP Addresses should be not be hard coded in the source code/configuration.
- To be IPv6 compliant
- Website should be running on SSL i.e. http request should automatically get redirected to https
- To have the flexibility to be linked to any existing/ future applications
- CAPTCHA should be present for web pages with form field such as feedback form, registration form etc.
- Email gateway Integration
- SMS gateway Integration for future purpose
- Password should not be hardcoded in any website configuration files or stored in plain text
- Should support web services APIs, BLOB Storage, custom code solutions, REST, WSRP
- Should integrate with instant messaging services for chat bot support, and support products and protocols like SIP/XMPP
- Should integrate with any other website products through open standards such as HTML, XML, RSS, web services, and WSRP

1.20 Compliances for Standards

The website/Portal shall be fully compliant as per the following Guidelines:

1. e-Governance Standards of GoI
2. e-Governance Policies of GoI and GoM / DIT
3. GoI Guidelines of Websites
4. W3C Standards
5. WCAG standards like 3.0 AA, xHTML1.0 or latest industry version
6. Website Guidelines by DIT, GOM
7. Unicode compliance
8. Guidelines for Indian Government Websites (GIGW 3.0)
9. Web Content Accessibility Guidelines (WCAG)

1.21 Site Logs

The Solution Provider shall be responsible for providing following features (not limited to) in website for tracking & logging. Data under these features shall be captured through any analytical tool which should have capability to produce both graphical & text-based reports & must have export capabilities in spreadsheet.

1. Web Traffic (Hourly, Daily, Weekly, Monthly & Yearly)
2. Total User Impressions
3. Page-wise web traffic
4. Browser Identification
5. Topmost visited pages
6. Least most visited pages
7. Length of stay on each page
8. Site Counter
9. User Installation Analytics
10. Bandwidth usage
11. Disk space usage of web hosting

1.22 Access to Visually Impaired

The contents of the Website should be readable using any Screen Access Reader software to visually impaired users.

1.23 Technical Documentation

The selected agency shall provide the following documentations in hard as well as soft copies:

- Detail Project Plan
- Design and Development plan
- Pre-commissioning, Operational and User Acceptance Testing Plan
- Monthly Progress Report
- System Requirement Specification (SRS) document containing detailed requirement capture and analysis including functional requirement, Interface Specifications, website security requirements.
- Complete Source Code with documentation
- Test Plans and Test cases (including Unit Test Plan, System/Integration Test Plan, User Acceptance Test Plan, Security Test Plan, Load Test Plan, VA-PT)
- Training Plan
- Hosting requirements and documentation
- User manuals
- Security policy and procedure for website/portal including Password security, logical access security, operating system security, data classification and website security and data backups

1.24 Data Migration

Data Migration in the context of this RFP shall be to entail migration of existing content and data. These are pertaining to the existing site-specific data, orders and circulars which is available over

the site currently. Successful Bidder is expected to provide following services, but not limited to:

1. Carry out the data migration from existing system(s) to proposed solution wherever applicable.
2. Bidder will have to import the data from the existing websites to the CMS system. The bidder will have to collaborate with the IELM Department to get the missing information and validation of the information.

1.25 Scalability & Extendibility

1. The Solution shall provide a scalable architecture. It should be compatible for the integration of existing as well envisaged modules.
2. The Solution shall support both horizontal and vertical scaling.
3. The Solution shall provide for expansion of data storage as needed to accommodate the increased volume of database on approved Capacity Plans by IELM Department.
4. The Solution should also make use of a distributed cache to enhance the scalability of the system.
5. Portal should be able to expose its services to third parties.
6. Systems/applications with REST/SOAP services or APIs. Portal applications if any should be able to integrate seamlessly with any other application.
7. Portal should extend its capability to easily integrate with existing IELM Department Citizen Services (if any).
8. The CMS/ Portal shall have a well-defined framework for extending the functionality of the core product, by adding more modules. This will enable IELM Department to request an additional module or set of modules without impacting either the core CMS application or other modules already in service.

1.26 Design

1. The bidder is required to meet all the requirements of the signed SRS and the activities listed, timelines and deliverables mentioned in this RFP.
2. The bidder should submit the solution design document to respective IELM Department officials prior to the submission of the product for the UAT.
3. The bidder should also submit a high-level design document for the entire solution consisting of deployment design, Coding standards, architectural requirements etc.

1.27 Hosting

- Website, Mobile Application, Chatbot and WhatsApp business API hosting shall be done on cloud. The bidder shall provide details for computing, storage, security, network infrastructure

based on scope of work defined and should explain the same to Industries, Energy, Labour and Mining Department IT department officials.

- The vendor shall procure the GCC Cloud through government empaneled CSPs/MSPs as per DIT or Meity. All the data on the cloud shall be owned by Industries, Energy, Labour and Mining Department.
- All the data created/captured under this project shall also be the property of the Industries, Energy, Labour and Mining Department.
- The bidder should adhere and comply with all related Government policies with regards to cloud hosting, released from time to time.
- It is the responsibility of the bidders to provide sizing of all the infrastructure & applications including cloud hosting (for DC & DR site), for meeting all the requirements. In case it is found that additional infrastructure & applications are required for meeting the requirement and the same has not been considered in sizing, the bidder shall provide/ host all such additional infrastructure/ applications at no additional cost to the department.
- The Bidder should share the expected sizing requirements for a period of 5 years during submission.
- The hosting shall include the following:
 - a. All compute infrastructure like web servers, application servers, database servers, etc.
 - b. Software Licenses (Database, Application, etc.)
 - c. SAN storage space
 - d. Backup Services (including file system and database)
 - e. Networking components like high availability switches, routers, firewalls, etc.
 - f. Load Balancers
 - g. Any other components required for the functioning of the proposed solution

1.28 Operation and Maintenance

The Successful bidder shall maintain and support the website for a period of 3 years (extendable up to 2 years) on an offshore support Model after the successful operational acceptance which would start after 1st year of issuance of WO.

Stabilization period: The Bidder shall provide User adoption support, by deputing necessary resources at the client site after Go-Live at that site for 1 month as stabilization period.

The team shall perform but not limited to the following activities during O&M period:

1. Upgrades, which would include version releases made by the Bidder to incorporate technological changes, consolidating all bug fixes, consolidating all enhancement requests made by IELM Department.
2. Modifications would include minor changes, bug fixes, error resolutions and minor enhancements that are incidental to proper and complete working of the website/ portal. Any UI/ UX change shall be considered as part of the maintenance activity.
3. Enhancements would include changes on the website and mobile application due to Statutory and Regulatory changes and changes required due to changes in industry and other Governance practices in India. It will also include all the functionalities. Any change request would be mutually agreed between the selected bidder and IELM department.
4. Provide handholding support and training services as part of the post implementation services, on a scheduled basis as well as on a need basis.
5. All incidents that occur as part of ongoing operations must be addressed and resolved within a

reasonable time frame as per the SLAs described in this document.

6. Changes to website and the CMS portals will go through all phases of testing by the Bidder. The test results must be documented and provided to IELM department for approval before a decision is made to put the new release into Production. All relevant system documentation should be updated and provided to IELM department at the conclusion of any system changes.
7. Perform system administration tasks such as managing the user access, creating and managing users, preparing MIS reports etc.
8. Performance tuning of the website/ portal to ensure adherence to SLAs and performance requirements as indicated in the document.
9. User support in case of technical difficulties in use of the software solution, answering procedural questions, providing recovery and backup information, and any other requirement that may be incidental.
10. Prompt receipt, analysis and reporting of reported deficiencies in the operation of the software solution and supply of information and advice on such deficiencies.
11. Unscheduled, on call, corrective and remedial maintenance and support services.
12. Integration of existing and envisaged 3rd party, software modules, API's, web-views as per the requirement of IELM department.
13. In case IELM department requires any enhancement or a new module development which was not a part of scope, IELM department may ask for the services of the bidder's staff as per the requirement of the Change. This change would form the part of change request management process. Bidder will be asked to submit a formal change request note along with the man-month effort estimation and schedule of deployment of resources. Commercial rates specified by the bidder for various categories of resources will be taken as base for reviewing the change request submitted by the bidder. Post the approval of IELM department the Change request will be processed and the activity can be completed.
14. Any change request would be mutually agreed between the selected bidder and IELM department.
15. At the end of the initial term of 3 years, IELM may continue the services and extend the term of the contract for another 2 years depending upon the performance of the Bidder and approval from competent authority. However, in case the IELM department wishes to engage a new Agency for support/ maintenance or any other enhancements, the Bidder should give the handover to the new Agency appointed by IELM department within a period of 2 months with all necessary documentation and project understanding.

1.29 Manpower Deployment

1. The bidder shall deploy 1 onsite dedicated manpower support for the period of 3 years from the start of O&M phase. This manpower support will work physically from IELM department, Mantralaya. The manpower will get all the holidays as per deemed fit by Maharashtra Government. However, the support manpower should be able to perform his duties remotely (i.e. work from home) in case of holidays or as per MSRTC's requirement post working hours.
2. The bidder is obliged to work closely with IELM Department's staff, act within its own authority and abide by directives issued by IELM Department.

1.30 Back up and Preventive Maintenance

The selected bidder shall provide for backup management services (conduct regular backups and restoration (if required)), of critical data and systems. The activities shall include:

1. Backup of operating system, database and application as per stipulated policies.
2. Monitoring and enhancement of the performance of scheduled backups, schedule regular testing of backups and ensure adherence to related retention policies.
3. Ensuring prompt execution of on-demand backups of volumes, files and database applications whenever required by IELM department or in case of upgrades and configuration changes to the system.
4. Real-time monitoring, log maintenance and reporting of backup status on a regular basis. Prompt problem resolution in case of failures in the backup processes.
5. On-going support for file and Folder restoration requests.

1.31 Indemnity

Bidder shall indemnify, protect and save Industries, Energy , Labour and Mining Department against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the hardware / software supplied by him.

1.32 Project Timelines

The Website has to go live by 30 September 2025.